

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1 (Currently Amended): A rotary electromechanical device, comprising:  
a rotor, the rotor comprising a hollow hub and a plurality of magnet poles, the hollow hub having at least one aperture at each end to form at least one first passage extending through the hollow hub;  
a stator; ~~and~~  
a sealed casing surrounding the rotor and the stator; ~~and~~  
at least one second passage extending between the stator and the sealed casing and communicating with each end of the at least one first passage to form a closed path entirely within the sealed casing for cooling air flowing through the rotor  
~~so that cooling air that flows through the rotor travels in a closed path entirely within the sealed casing.~~

Claim 2 (Currently Amended): The device of Claim 1, wherein the at least one first passage extends along a rotational axis of the hollow hub from one end of the hollow hub to the other end of the hollow hub.

Claim 3 (Original): The device of Claim 1, wherein the rotor further comprises vanes fixed to the hollow hub to force air through the hollow hub when the rotor is spinning.

Claim 4 (Original): The device of Claim 3, wherein the vanes are located in the at least one passage.

Claim 5 (Original): The device of Claim 3, wherein the vanes are located at the at least one aperture.

Claim 6 (Original): The device of Claim 3, wherein the vanes are arranged to drive air in the same direction.

Claim 7 (Currently Amended): The device of Claim 1, ~~comprising:~~  
wherein the at least one second passage ~~a) having~~ has walls formed by at least one of the stator and the outer casing, ~~and b) communicating with each end of the at least one first passage casing.~~

Claim 8 (Original): The device of Claim 7, wherein the device is a brushless machine.

Claim 9 (Original): The device of Claim 7, wherein the at least one second passage extends through the stator.

Claim 10 (Canceled): The device of Claim 7, wherein the at least one second passage extends between the stator and a case of the device.

Claim 11 (Currently Amended): The device of Claim 1, ~~comprising a~~ wherein the stator partially ~~surrounding~~ surrounds the rotor.

Claim 12 (Currently Amended): A method for cooling a rotary electromechanical device having a rotor with a first aperture at one end of the rotor, a second aperture at an opposite end of the rotor, and a first passage extending through the rotor along a rotational axis of the rotor and connecting the first and second apertures, a stator and a sealed casing surrounding the rotor, wherein at least one second passage is formed between the sealed casing and the stator and communicates with the first and second apertures, the method and the stator so that cooling air that flows through the rotor travels in a closed path entirely within the sealed casing, comprising:

~~providing the rotor with a hollow center and apertures at each end of the rotor; and~~  
~~driving air~~ into the first aperture, through the ~~hollow center of the rotor via the~~  
~~apertures~~ first passage and out the second aperture; and

driving air from the second aperture through ~~passages formed between the sealed casing and the stator~~ the at least one second passage to the first aperture.

Claim 13 (Original): The method of Claim 12, further comprising:  
providing vanes at an end of the rotor; and  
spinning the rotor to drive air through the apertures and the hollow center of the rotor via the vanes.

Claim 14 (Currently Amended): An electric machine, comprising:  
a rotor;  
a stator;  
a sealed casing surrounding the rotor so that cooling air that flows through the rotor travels through the rotor and then between the stator and the sealed casing in a closed path entirely within the sealed casing; and  
means for driving air through a center of the rotor.

Claim 15 (Original): The electric machine of Claim 14, wherein the means for driving air is arranged to drive air through the center of the rotor, along a rotational axis of the rotor.

Claim 16 (Original): The electric machine of Claim 14, wherein the means for driving comprises:

vanes fixed to the rotor and angled to force air through a hollow hub of the rotor when the rotor is rotating.

Claim 17 (Previously Presented): The electric machine of Claim 14, comprising:  
a stator partially surrounding the rotor within the sealed casing; and  
means for conveying air exiting from one end of the rotor, to the other end of the rotor.

Claim 18 (Previously Presented): The electric machine of Claim 14, comprising:  
  
bearings encompassing a shaft fixed to the rotor and supporting the shaft relative to the sealed casing.

Claim 19 (Previously Presented): The method of Claim 12, comprising:  
  
supporting the rotor relative to the sealed casing via bearings encompassing a shaft fixed to the rotor.

Claim 20 (Previously Presented): The rotary electromechanical device of Claim 1, comprising:

bearings encompassing a shaft fixed to the rotor and supporting the shaft relative to the sealed casing.

Claim 21 (Currently Amended): A rotary electromechanical device, comprising:

a casing;

a stator;

a rotor, the rotor comprising a hollow hub and a plurality of magnet poles, the hollow hub having at least one aperture at each end to form at least one first passage extending through the hollow hub;

a shaft secured to the rotor in a non-rotatable manner; and

bearings mounted on the casing for supporting the shaft,

wherein the casing is sealed and surrounds the rotor and the stator so that cooling air that flows through the rotor travels through the rotor and then between the stator and the sealed casing in a closed path entirely within the sealed casing.

Claim 22 (Canceled)

Claim 23 (Previously Presented): The device of Claim 21, comprising air passages formed between the sealed casing and the stator.

Claim 24 (Previously Presented): The device of Claim 1, wherein the closed path passes between the rotor and the stator.